Final Statement of Reasons for Rulemaking

Including Summary of Comments and Agency Responses

PUBLIC HEARING TO CONSIDER PROPOSED REGULATION ORDER: AIRBORNE TOXIC CONTROL MEASURE TO LIMIT SCHOOL BUS IDLING AND IDLING AT SCHOOLS

Public Hearing Date: December 12, 2002 Agenda Item Number: 02-9-2

State of California AIR RESOURCES BOARD

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I. GENERAL

The Staff Report: Initial Statement of Reasons for Rulemaking (Staff Report) entitled Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools, released October 25, 2002, is incorporated by reference herein.

A. Description of Board Action

At a public hearing on December 12, 2002, the Air Resources Board (the "Board" or ARB) considered and unanimously approved Resolution 02-33 adopting the Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools (ATCM) with staff's proposed modifications. As part of its regulatory action, the Board directed staff to: 1) revise the regulation as per proposed modifications; 2) report in 2004 on the implementation and compliance status of the ATCM; and 3) explore the development of additional regulations that would expand idling limits to commercial vehicles at locations other than schools.

The Board adopted the ATCM into Chapter 10 - Mobile Source Operational Controls, Article 1 - Motor Vehicles, section 2480, title 13, California Code of Regulations (CCR). The purpose of the ATCM is to reduce children's and the public's exposure to diesel exhaust particulate matter (diesel PM) and other toxic air contaminants (TACs) by eliminating unnecessary idling of school buses and of transit buses and other commercial motor vehicles operating at or near schools.

B. Modifications to the Original Proposal

At the adoption hearing, the staff presented, and the Board approved, minor modifications proposed in response to comments received during the public comment period that began on October 25, 2002, and ended at the hearing on December 12, 2002. These modifications were explained in detail in the Notice of Public Availability of Modified Text that was issued for a 15-day public comment period that began on March 7, 2003, and ended on March 24, 2003. In

order to provide a complete Final Statement of Reasons for this rulemaking, the modifications are also explained below:

Clarify that the ATCM applies only to school buses, school pupil activity buses, general public paratransit vehicles, youth buses, transit buses and other heavy-duty vehicles not used solely as private passenger vehicles.

In accordance with the Board's directive, the term "heavy-duty vehicle" was replaced with the term "commercial motor vehicle" throughout the ATCM and subsection (h), Definitions, was modified to delete the definition of "heavy-duty vehicle" and add the definition of "commercial motor vehicle."

The definition of "commercial motor vehicle" in modified subsection (h)(2) is based upon Vehicle Code section 15210(b) and includes any vehicle or combination of vehicles that requires a class A or B commercial driver's license or a class C driver's license with a hazardous materials endorsement. The definition also includes any motor truck with gross vehicle weight rating of 10,001 pounds or more. A definition of "motor truck" based upon Vehicle Code section 410 was added as revised subsection (h)(9) of the ATCM. According to Vehicle Code section 410, a "motor truck" is a vehicle designed, used, or maintained primarily for the transportation of property. For the purposes of the ATCM, a "commercial motor vehicle" does not include a zero emission vehicle or a pickup truck.

The net result of this modification to the ATCM is to substitute for the previous certification-specific "heavy-duty vehicle" definition a modified "commercial motor vehicle " definition that 1) is more commonly understood by the regulated community and training and enforcement agencies; and 2) covers most of the heavy-duty vehicles originally proposed. As the Board directed, the modification to the ATCM excludes passenger cars and pickups from its applicability. In addition, the modification reduces potential complaint registration and enforcement problems by eliminating the need to determine whether vehicles between 6,000 and 10,001 pounds are being used solely to transport passengers. The modification does not specifically exclude the non-commercial use of unusually large (i.e., greater than 10,001 pounds) vans and covered-bed pickups; however, staff intends, and believes it would further the Board's intent, that such vehicles not be subject to citation for non-compliance with the ATCM's requirements if they are being used as private passenger vehicles.

For additional clarity, subsection (b), Applicability, of the ATCM was modified to reference subsection (h), Definitions. Subsection (h) contains a definition for each passenger-type vehicle that is subject to the ATCM (i.e., the definitions of "school bus," "school pupil activity bus," "youth bus," "general public paratransit vehicle," and "transit bus") as well as the definition of "commercial motor vehicle."

This modification is also mentioned in Sections II.A.21 and B.1 of this document.

Clarify that the exemption for idling to operate defrosters, heaters, air conditioners, or other equipment is to ensure the safety or health of the driver or passengers, or as otherwise required by federal motor carrier safety regulations.

As directed by the Board, subsection (d)(7) of the ATCM was modified to broaden the exemption and to recognize other laws (i.e., State and federal) regulating the operation of defrosters, heaters, air conditioners, or other equipment. As part of the modification, the definition of "Emergency" in subsection (h), Definitions, was deleted since the term is no longer used in the ATCM. This modification is also discussed in Section II.A.6, 7, and 8 of this document.

Clarify that the California Highway Patrol are a subset of peace officers and need not be separately referenced and, in addition, to recognize that there are designees of peace officers who are authorized to enforce certain laws as peace officers.

In accordance with the Board's directive, subsection (g), Enforcement, was modified to delete the words, "California Highway Patrol," and to identify peace officers as: "peace officers as defined in California Penal Code, title 3, chapter 4.5, Sections 830 et seq. and their respective law enforcement agencies' authorized representatives." The modified language does not change those agency representatives who may issue citations for violation of the ATCM; however, it does acknowledge that authorized representatives of law enforcement agencies may perform ancillary functions, e.g., review motor carrier records. This modification is also discussed in Section II.A.20 of this document.

Clarify subsection (d)(5) of the ATCM to include refuse pickup as an example of an exemption for idling necessary to accomplish work for which a vehicle was designed.

As directed by the Board, subsection (d)(5) was modified to add the collection of solid waste and recyclable materials by authorized entities as an example of an activity where idling is necessary to perform work for which a vehicle was designed. This modification does not expand or reduce the activities exempted by subsection (d)(5) of the ATCM. This modification is also discussed in Section II.A.19 of this document.

In addition, the ATCM was modified to update references, correct typos, and to make the following minor clarifications:

- Subsections (c)(3)(C) and (c)(4)(C) The words, "as defined in subsection (g)," were added to clarify "enforcement personnel."
- Subsection (d)(2) The word, "driver's," was added to clarify "daily vehicle inspection" because the driver's daily vehicle inspection is widely understood to be the inspection conducted just prior to commencing driving for the day.

 Subsection (h) - The introductory phrase, "The following terms are defined for the purposes of this section," was added to clarify that certain commonly-used terms may be uniquely defined in the ATCM.

A single written comment was received regarding the modifications (see Section II.B. of this document).

C. Incorporation by Reference in Regulation

The ATCM includes the following references to other regulations in order to avoid an unnecessarily lengthy and repetitious regulatory text: Section 2480 (e) Relationship to Other Law

- (e)(1) section 1226, title 13, California Code of Regulations
- (e)(2) section 22515, Vehicle Code

Section 2480 (g) Enforcement - sections 830 et seq., Penal Code Section 2480 (h) Definitions

- (h)(1) section 56026, Education Code
- (h)(2) sections 471 and 15210(b), Vehicle Code
- (h)(4) section 336, Vehicle Code
- (h)(10) section 21400. Vehicle Code
- (h)(13) section 545, Vehicle Code
- (h)(14) section 546, Vehicle Code
- (h)(15) section 642, Vehicle Code
- (h)(16) section 680, Vehicle Code

Generally, affected drivers, motor carriers, and enforcement personnel are familiar with the provisions and definitions referenced in the ATCM. In addition, the referenced statutes and regulations are easily accessed by the public at State and local libraries and are available electronically via Internet web sites (e.g., http://www.leginfo.ca.gov/calaw.html and http://www.oal.ca.gov/).

D. Fiscal Impacts for School Districts and Local Agencies

The Board has determined that this regulatory action will result in a mandate to school districts, regional transit agencies, and other local public agencies that operate commercial motor vehicles at or near schools. However, the Board finds that any costs associated with such mandate are not reimbursable pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code, because, pursuant to section 17566 of the Government Code, private sector transportation and other businesses would be subject to the same requirements and costs as school districts, regional transit agencies, and other local public agencies.

F. Consideration of Alternatives

Proposed alternatives to this regulatory action included: no action, limiting applicability to diesel-fueled heavy-duty vehicles, requiring automatic engine shut-off devices, and requiring diesel particulate filters. None of these alternatives provided a reasonable means of protecting public health and lessening any adverse economic impact on small businesses.

Not taking regulatory action would have failed to protect children and the public from excessive levels of diesel PM and other TACs. Limiting applicability to diesel-fueled vehicles would have failed to protect children and the public from excessive levels of TACs and other air pollutants emitted by gasoline- and alternative-fueled vehicles other than zero emission (e.g., electric) vehicles. Automatic engine shut-off devices were rejected because such ignition-limiting devices make it difficult for drivers to maneuver to avoid traffic hazards. Diesel particulate filters were rejected because only about 30 percent of the school bus fleet could be retrofitted with certified devices at this time. Moreover, requiring new or add-on shut-off or filter devices would pose more of a cost burden for school districts and affected small businesses than the ATCM which simply requires that vehicle engines be manually turned off when idling is not necessary.

The Board has further determined that no alternative considered by the agency would be more effective in carrying out the purpose for which the regulatory action was proposed or would be as effective and less burdensome to affected private persons than the action taken by the Board. See Resolution 02-33 at page 5.

II. SUMMARY OF COMMENTS AND AGENCY RESPONSES

The Board received written and oral comments in connection with the public comment period for the Proposed ATCM that began on October 25, 2002, and ended at the hearing on December 12, 2002. The Board also received a single written comment during the 15-day public comment period for the modified regulatory language. Persons that commented on the Proposed ATCM or the modified regulatory language are listed below. Following each list of commenters is a summary of, and response to, each objection or recommendation. The response is an explanation of either the changes made as a result of an objection or recommendation or the reasons for making no change.

A. Responses to Comments on Proposed ATCM (Received October 25, 2002 through December 12, 2002)

List of Commenters That Submitted Written or Verbal Comments During the 45-Day Comment Period

- Diane Bailey, Natural Resources Defense Council (NRDC), December 12, 2002
- Jack P. Broadbent, United States Environmental Protection Agency, Region IX (U.S. EPA), November 29, 2002
- Del Corley, Lindsay Unified School District, November 25, 2002
- Adam Cuevas, California Highway Patrol (CHP), December 12, 2002
- Carol A. Curtis, Citizen, November 8, 2002
- Sean Edgar, California Refuse Removal Council, December 12, 2002
- Gretchen Hardison, City of Los Angeles, December 6, 2002
- Guy B. Heston, Long Beach Transit, December 9, 2002
- Richard Hibbs, Golden Gate Transit, December 12, 2002
- Rachel Kaldor, Dairy Institute of California, December 5, 2002
- Douglas Quetin, California Air Pollution Control Officers Association (CAPCOA), December 10, 2002
- Gina Solomon, Natural Resources Defense Council, on behalf of the other signatories: Coalition for Clean Air, American Lung Association of California, California League of Conservation Voters Education Fund, Planning and Conservation League, Union of Concerned Scientists (NRDC et al.), December 6, 2002
- Janice B. Tunder, The Solano Asthma Coalition, December 11, 2002
- Gene Walker, Golden Gate Bridge Highway and Transportation District, December 6, 2002, and California Transit Association (CTA), December 12, 2002
- Steve Wallauch, Lynn M. Suter and Associates, December 9, 2002
- Chuck White, Government Affairs, Waste Management/West, December 11, 2002
- Paul Wuebben, South Coast Air Quality Management District (SCAQMD), December 12, 2002
 - 1. <u>Comment</u>: Several commenters (specified below) recommended that the Board adopt the ATCM because it provides health-protection to children and others by reducing exposure to diesel PM and other TACs in heavy-duty bus and vehicle exhaust. [Jack P. Broadbent, U.S. EPA; Carol A. Curtis, Citizen; Douglas Quetin, CAPCOA; Gina Solomon, NRDC et al.; Janice B. Tunder, The Solano Asthma Coalition; Paul Wuebben, SCAQMD]

Agency Response: At a public hearing on December 12, 2002, the Board unanimously adopted the ATCM and staff's proposed modifications to clarify

the ATCM. See Section I.B. of this document for an explanation of the proposed modifications.

2. <u>Comment</u>: Rachel Kaldor, Dairy Institute of California, supports the exemption of specific idling situations where health, safety, or operational concerns take precedence, e.g., idling to control cargo temperature and to operate a lift is necessary for the safe delivery of perishable food such as dairy products. [Rachel Kaldor, Dairy Institute of California]

Agency Response: The Board approved and adopted the proposed exemptions for specific idling situations as part of the ATCM. Subsection (d)(5) of the ATCM includes cargo temperature control and lift operation as examples of such situations.

3. <u>Comment</u>: Instead of adopting an ATCM, existing laws and regulations should be used to reduce children's and others' exposure to heavy-duty bus and vehicle exhaust. [Guy B. Heston, Long Beach Transit]

Agency Response: Health and Safety Code section 39665 requires staff to conduct a regulatory needs assessment for each air toxic regulation. As part of the regulatory needs assessment for the school bus idling ATCM, the ARB staff concluded that existing federal, State, and local laws were not sufficiently health protective.

Emission Standards

Federal and State emission standards are not sufficient because they do not address emissions and exposure that result from unnecessary idling. In addition, emission standards for California school buses manufactured before 1987 are less stringent than those for later model school buses. The pre-1987 buses currently comprise about 25 percent of the entire school bus fleet and, due to replacement costs, are likely to comprise a substantial part of the fleet for at least the near future.

 California's Heavy-Duty Vehicle Inspection Program and Periodic Smoke Inspection Program [13 CCR §§ 2180-2188 under HSC §44011.6 authority, and 13 CCR §2190-2194 under HSC §43701(a) authority, respectively]

The California Heavy-Duty Vehicle Inspection Program and Periodic Smoke Inspection Program are not sufficient because they do not specifically address children's exposure to diesel PM and other toxic air contaminants from the unnecessarily idling of school transportation buses and vehicles. This means that unnecessary emissions and exposure may occur even if a heavy-duty bus or other commercial vehicle is complying with these two programs.

Anti-idling Laws

The federal government has no motor vehicle anti-idling laws or regulations and no plans to promulgate any.

Existing California statutes and regulations that specifically address idling are not sufficient because they are limited in applicability and scope. California Health and Safety Code section 42403.5 (Bus Idling, Civil): 1) does not eliminate unnecessary idling at or near school grounds; 2) fails to address 13 percent of school buses that are not diesel-powered; 3) fails to address heavy-duty motor vehicles other than buses that operate at or near schools; 4) includes a broad exemption; 5) possibly due to the broad exemption, staff are unaware of any routine enforcement of the statute; and 6) enforcement action, if taken, would be limited to the imposition of a civil penalty with no required follow-up on the part of motor carriers. Title 13, California Code of Regulations, section 1226, and Vehicle Code, section 22515, preclude idling only when a driver leaves a school bus driver's compartment or leaves a bus or vehicle unattended on a highway.

A staff survey of 35 air district rulebooks and more than 800 California school district transportation officials failed to identify any local regulations or ordinances limiting idling.

4. <u>Comment</u>: Subsection (d)(2) of the ATCM should be modified to avoid a conflict with pre-trip mechanical inspection requirements pursuant to section 392.7, title 48, Code of Federal Regulations. [Steve Wallauch, Lynn M. Suter and Associates]

Agency Response: The ATCM does not conflict with federal or State pre-trip inspection requirements. Subsection (d)(2) of the ATCM states that the regulation does not apply for the period or periods during which "... idling is necessary to ascertain that the school bus, transit bus, school pupil activity bus, youth bus, general public paratransit vehicle, or other commercial motor vehicle is in safe operating condition and equipped as required by all provisions of law, and all equipment is in good working order, either as part of the driver's daily vehicle inspection, or as otherwise needed ..." The phrase "... as required by all provisions of law" includes exemption for the federal pre-trip inspection requirements referenced in the comment. See also: Agency Response to Comment 5.

5. <u>Comment</u>: As proposed, subsection (d)(2) of the ATCM could be used to justify any idling behavior as "exempt idling." Therefore, in subsection (d)(2), the words "as otherwise needed" should be replaced with "in an emergency." [Gina Solomon, NRDC et al.]

Agency Response: It is very unlikely that the exemption in subsection (d)(2) of the ATCM will be abused. To be covered by

subsection (d)(2), a driver must be actively checking equipment and have a legitimate reason for doing so. Chapter IV. B., Exemptions, Safety Equipment Inspection, of the Staff Report clarifies that subsection (d)(2) does not apply to an inspection that could be conducted with the engine off.

Limiting equipment inspections solely to pre-trip and emergency situations as suggested by the comment could jeopardize the safety of passengers and drivers. Once an emergency situation arises, there may be little or no time to perform an equipment inspection. Since malfunctioning equipment could turn routine operation into an emergency or an emergency into a catastrophe, a driver must be able to inspect before an emergency occurs. For example, a driver should be able to idle in order to check the brake system whenever he/she perceives a legitimate need (e.g., roads become wet or icy or there is cause to suspect that the brake system could malfunction), not just at the beginning of the day or during an emergency.

6. <u>Comment</u>: The ATCM does not allow sufficient idling time to heat or cool a transit bus. Subsection (d)(7) of the ATCM should be modified to avoid conflict with requirements to maintain a reasonable inside-bus temperature pursuant to section 374.313, title 49, Code of Federal Regulations. [Gene Walker, Golden Gate Bridge Highway and Transportation District; Steve Wallauch, Lynn M. Suter and Associates]

Agency Response: Subsection (d)(7) was modified to replace the words "... to prevent a safety or health emergency; and not solely for the comfort of the driver or passengers; ..." with the words "... to ensure the safety or health of the driver or passengers, or, as otherwise required by federal or State motor carrier safety regulations; " See also: Agency Response to Comment 7.

7. <u>Comment</u>: In subsection (d)(7)(A) of the Proposed ATCM, the exempted idling to operate heaters and air conditioners "to prevent a safety or health emergency" should be allowed only "during extreme climate conditions." The "extreme climate conditions" should be defined in terms of temperature and relative humidity in Subsection (h) Definitions. [Diane Bailey, NRDC; Gina Solomon, NRDC et al.]

Agency Response: With the exception of children with exceptional needs who require consistent moderate temperatures in order to avoid seizures, the ARB agrees that idling to operate heaters and air conditioners is only necessary during extremely hot or cold weather. However, after extensive research and consultation, no consensus was reached on specific temperatures that warrant idling to operate heaters or air conditioners for typical drivers and passengers. Likewise, no cost-effective means of ensuring compliance with a provision based upon specific temperatures or temperature ranges were identified.

Throughout the development of the ATCM, ARB staff proactively investigated specific temperatures and temperature ranges as possible triggers for an idling limit exemption to operate heaters or air conditioners. In discussing a draft ATCM at workshops before releasing the ISOR and proposed regulatory text, staff solicited public and stakeholder comment on specified temperature ranges based upon those identified in other state and local anti-idling laws. During this process, the following issues were identified:

- The amount of ventilation and parking location for a bus or vehicle (e.g., full sun versus shade) may have a greater influence on inside-bus or vehicle temperature than does ambient temperature;
- Because buses tend to heat and cool unevenly, inside-bus temperature varies from area to area within the bus;
- Requiring buses to be equipped with thermometers would necessitate burdensome regulatory changes and expense for school districts and others; and
- States that have defined temperature ranges in their exemptions to their anti-idling laws indicate that they are difficult to enforce and, therefore, not routinely enforced.

Although subsection (d)(7) has been modified to replace the words "... to prevent a safety or health emergency; and not solely for the comfort of the driver or passengers; ..." with the words "... to ensure the safety or health of the driver or passengers, or, as otherwise required by federal or State motor carrier safety regulations; ...," our intention to limit idling for heater or air conditioner operation to extreme hot or cold weather continues. Under all but extreme weather conditions, inside bus temperatures are expected to remain tolerable since engine shut-off will be infrequent and brief. Once a bus is moving, heaters or air conditioners can be turned on to maintain, or to quickly reestablish, a comfortable temperature.

At the adoption hearing for the ATCM, the Board requested staff to report back in 2004 regarding implementation and compliance. If the idling exemption to operate heaters or air conditioners appears to be an implementation or compliance problem, this report may be used as a means of alerting the Board and recommending possible solutions to the issue.

8. <u>Comment</u>: Section (d)(7) of the ATCM should be modified to enable vehicles to develop sufficient system air pressure to operate brakes and other equipment pursuant to section 393.52, title 49, Code of Federal Regulations. [Gene Walker, Golden Gate Bridge Highway and Transportation District; Steve Wallauch, Lynn M. Suter and Associates]

Agency Response: As noted in Agency Responses to Comments 6 and 7, Subsection (d)(7) was modified to replace the words "... to prevent a safety or health emergency; and not solely for the comfort of the driver or passengers;

..." with the words "... to ensure the safety or health of the driver or passengers, or, as otherwise required by federal or State motor carrier safety regulations; ... " In addition the Staff Report, Chapter IV.B. Exemptions, Defroster, Other Safety Equipment, Heater, Air Conditioner Operation, discusses that the subsection (d)(7) exemption to the ATCM is intended to include idling until pressure reaches the appropriate level for optimum brake, as well as other safety-related equipment, operation.

9. <u>Comment</u>: Public transit buses should not be subject to the ATCM's prescriptive requirements, including recordkeeping. These requirements would deter placement of transit bus stops near schools and have a deleterious effect on students who rely on transit bus service. [Guy B. Heston, Long Beach Transit]

Agency Response: Initially, the ARB staff envisioned that the ATCM would apply only to school buses. However, based upon comments received from school district transportation officials, the Natural Resources Defense Council, California Parent-Teacher Association, the California Highway Patrol, the California Department of Education (CDE), U.S. Environmental Protection Agency, and others, applicability was expanded to other forms of school transportation and to transit buses and other commercial motor vehicles operating at or near schools. Similar to school buses, these other buses and vehicles emit diesel PM and/or other harmful TACs.

The ATCM's idling and recordkeeping requirements should have little, if any, effect on current transit bus operation. Transit buses generally do not stop on school grounds and are unlikely to spend more than five minutes at any bus stop within 100 feet of a school. A transit bus driver can easily avoid the need to switch off the bus engine within 100 feet of a school by arriving no more than five minutes before scheduled departure. Subsection (d) of the ATCM provides several exemptions for idling necessary for health, safety, or operational purposes. For example, subsection (d)(6)(A) provides an exemption from the five-minute limit in order to operate a lift or other piece of equipment designed to ensure safe loading or unloading of persons with one or more disabilities.

Regarding annual training and recordkeeping requirements, a transit agency is expected and encouraged to use existing information dissemination and personnel procedures to fulfill the ATCM's requirements.

10. <u>Comment</u>: The ARB should explain whether or not the required records regarding driver training, complaints, and enforcement actions will be audited. [Richard Hibbs, Golden Gate Transit]

<u>Agency Response</u>: The ARB Enforcement Division does not intend to routinely audit records tracking drivers' training, complaints, or enforcement

actions. However, the ARB reserves the right to review these records and is likely to do so if the public registers multiple complaints or inspectors issue multiple citations against a driver or drivers for a particular motor carrier.

11. Comment: The ATCM should clarify which buses or vehicles are subject to idling limitations beyond 100 feet from a school. [Gene Walker, Golden Gate Bridge Highway and Transportation District]

Agency Response: The ATCM's subsection (c)(1)(B) requirement that limits idling at locations greater than 100 feet from a school clearly applies only to a driver of a bus or vehicle specified in subsection (c)(1), i.e., "a driver of a school bus, school pupil activity bus, youth bus, or general public paratransit vehicle." These buses and vehicles are defined in subsection (h), Definitions, of the ATCM. Subsection (c)(2) sets forth the idling limitations for a driver of a transit bus or a commercial motor vehicle not identified in subsection (c)(1) and does not contain any requirement for locations greater than 100 feet from a school. Therefore, no change is needed in section (c) of the ATCM as a result of Comment 11. Please see Section I.B. of this document for an explanation about the replacement of the term and definition of "heavy-duty vehicle" with the term and definition of "commercial motor vehicle."

12. <u>Comment</u>: The ARB staff should investigate the effects of the ATCM's limit on idling at locations greater than 100 feet from a school and discuss the issue with transit agencies and other vehicle operators. This limit is unreasonable and jeopardizes the intent of the ATCM. [Gene Walker, Golden Gate Bridge Highway and Transportation District]

Agency Response: A transit bus or commercial motor vehicle (other than a school bus, school pupil activity bus, youth bus, or general public paratransit vehicle) is subject to a five-minute idling limit only when stopped within 100 feet of a school. The ATCM contains no idling limit for a transit bus or other commercial motor vehicle operating at locations greater than 100 feet from a school.

All of the ATCM's idling and other requirements have been communicated to transit agencies and other affected stakeholders via publication of draft, proposed, and modified versions of the ATCM; two public workshop presentations and discussions; a public hearing notice sent to approximately 17,000 individuals and organizations; a public hearing presentation and discussion; a conference call with five high level transit organization officials on September 20, 2002; and various other meetings, telephone conversations, and e-mails. In addition, copies of the draft, proposed, and modified text of the ATCM were made available as they were developed (and continue to be available) at an Internet web site

[http://www.arb.ca.gov/toxics/sbidling/sbidling.html] or by contacting ARB staff by letter, e-mail, or telephone.

The subsection (c)(1)(B) requirement referred to in the comment applies only to school buses, school pupil activity buses, youth buses, and general public paratransit vehicles whose primary purpose is the transportation of children. A special idling limit for drivers of school transportation is warranted because children are disproportionately exposed and especially susceptible to the health risks associated with diesel PM and other TACs and air pollutants emitted by such buses and vehicles. This provision will help fulfill the ARB's goal of reducing children's and others exposure and health risks due to these harmful substances.

Subsection (c)(1)(B) is reasonable because it allows affected drivers up to five minutes of idling during each loading/unloading event at locations beyond schools, e.g., school bus stops or off-site school activities, to enable drivers to stay on schedule enroute to or from a school or school activity.

Subsection (d) of the ATCM provides exemptions to the five-minute limit during special circumstances when additional idling time is necessary for health, safety or operational purposes. In addition, the five-minute idling limit is reasonable because it is expected to result in fuel and vehicle maintenance cost savings as well as reductions in emissions, exposure, and health risk.

13. Comment: The ATCM should clarify whether the requirement to limit vehicle idling to an aggregated total of five minutes during any one hour [see subsections (c)(1)(B)(ii) and (c)(2)(B)(ii)] applies to a single bus at a stop or to multiple buses that use the stop. Multiple buses using busy routes and central hubs could not operate under such a constraint. In addition, such a requirement would increase restarts, and, as a result, starter and other equipment wear. [Richard Hibbs, Golden Gate Transit; Gene Walker, Golden Gate Bridge Highway and Transportation District and CTA]

Agency Response: As clarified at two public workshops and a public hearing, "must not cause or allow a bus or vehicle to idle at any location ... for: more than five consecutive minutes; or a period or periods aggregating more than five minutes in any one hour ..." means that each bus is effectively allowed five minutes to idle each time it stops.

Restarts as a result of the ATCM should not significantly affect the ability of buses to meet schedules nor increase maintenance costs. At locations where the five-minute idling limit applies, restarts can be avoided by arriving no more than five minutes before the scheduled departure. At locations where turning off the engine is mandatory, e.g., on school grounds, few restarts should be necessary because transit buses rarely stop on school grounds and the majority of school buses stop on school grounds only twice per day: to unload in the morning and to load in the afternoon. Therefore, the ATCM

should result in infrequent additional restarts per day for transit buses and an estimated three to ten additional restarts per day for school transportation buses and vehicles. Information from the Truck Maintenance Council, Caterpillar, Inc., and the California Department of Transportation indicate that three to ten additional restarts per day will have a negligible effect on starter or other equipment wear. On the contrary, experts generally agree that decreased idling saves fuel and decreases engine wear and maintenance costs.

For further clarification about the "aggregated limit" please see Agency Response to Comment 14.

14. <u>Comment</u>: The summary in Appendix B of the Staff Report does not indicate if other state and local air quality agencies support the ATCM's aggregated five-minutes per hour idling limit. [Gene Walker, Golden Gate Bridge Highway and Transportation District]

Agency Response: Of the 50 states surveyed, only those cited and summarized in Appendix B, Summary of Anti-idling Regulations in Other States, responded with a statewide or local anti-idling law. If a state is not listed in Appendix B, this means that the environmental or air quality official of that state indicated no knowledge of an anti-idling law. ARB can not rule out the possibility of additional local regulations of which state officials were not aware. Also, because the staff's survey was intended to identify measures enforceable by law, ARB can not rule out the possibility of written or verbal anti-idling policies that might be in effect in other states.

As indicated by the Staff Report, Appendix B, most existing statewide or local anti-idling laws simply set forth a time limit for allowable idling in " \underline{X} minutes" or " \underline{X} consecutive minutes." The two exceptions are:

- City Code section 4-48 for Denver, Colorado, which specifies an idle limit of 10 minutes in any one hour; and
- Lewis and Clark County Rule 3.101, Montana, which specifies an idle limit of two hours in any 12-hour period.

Although state and local agencies in other states may not choose to use the "aggregated limit" approach in existing anti-idling measures, such an approach is quite common in association with air quality measures. For example, all states have some form of visible emissions requirement for stationary and/or mobile sources that limits percent opacity of any discharge "for a period or periods aggregating more than \underline{X} minutes in any one hour." The purpose of such language is to clarify the limit and prevent circumvention. As explained in the Staff Report, Chapter IV.B., Idling Control Measure - Requirements, page 34, paragraph 1, the ATCM's subsection (c)(1)(B)(ii) and subsection (c)(2)(B)(ii) provisions that prohibit idling for "a period or periods aggregating more than five minutes in any one

hour" are intended to prevent a driver at a single stopping location from circumventing subsection (c)(1)(B(i)) or subsection (c)(2)(B)(i) by idling the engine for several less-than-five-minute intervals that could total more than five minutes during the course of a single hour.

For further clarification of the "aggregated limit," please see the Agency Response to Comment 13.

15. <u>Comment</u>: The ATCM should clarify whether liquid natural gas (LNG)-, compressed natural gas (CNG)-, and gasoline-fueled vehicles are subject in addition to diesel-fueled vehicles. [Gene Walker, Golden Gate Bridge Highway and Transportation District]

Agency Response: By definition, the only buses or vehicles excluded from applicability to the ATCM are those that have zero emissions. Specifically, subsection (h), Definitions, of the ATCM contains a definition for each of the buses or vehicles identified in subsection (b), Applicability. These definitions indicate that all subsection (b) buses or vehicles that are not zero emission are subject to the ATCM. To date, the only zero emission buses or vehicles generally available are those exclusively powered by electricity. Applicable buses and vehicles are those powered by the combustion of diesel, gasoline, LNG, CNG, or other fuels. These buses and vehicles are subject to the ATCM because they emit one or more TACs for which there are no known safe exposure levels. See also Agency Response to Comment 16 below.

16. <u>Comment</u>: The ARB should explain why the ATCM applies to alternative-fueled vehicles when federal, State, and regional air quality agencies have promoted the replacement of diesel-fueled vehicles with alternative-fueled vehicles. [Gretchen Hardison, City of Los Angeles]

Agency Response: Although alternative-fueled buses and vehicles, such as those powered by LNG and CNG, generally emit lower levels of TACs and other air pollutants than do many diesel-powered buses and vehicles on the road today, they are not emission-free. These alternative-fueled buses and vehicles emit the following TACs for which there are no known safe exposure levels: acetaldehyde, formaldehyde, benzene, and acrolein. They also emit particulate matter. To date, only electric-powered buses and vehicles can be considered to have zero emissions and are not subject to the ATCM. See also Agency Response to Comment 15 above.

17. <u>Comment</u>: Older school buses create more pollution when starting than if left running for a ten-minute period. The idling limitations in the ATCM would result in more restarts and be counterproductive. [Del Corley, Lindsay Unified School District]

Agency Response: With regard to diesel PM, related TAC, and other air pollutant emissions and exposure, the ATCM idling limits are beneficial rather than counterproductive as the comment suggests. Staff analyses show that annual PM10 (particulate matter 10 micrometers or less in diameter), including diesel PM, emissions are expected to increase as idling time increases. For example, assuming 2, 10, and 20 minutes of idling time per day per bus, staff estimated Statewide 2002 school bus fleet emissions at approximately 0.25, 1.4, and 2.9 tons per year, respectively. The ATCM is expected to reduce localized exposures to diesel PM and related TACs in the vicinity of schools and to modestly reduce oxides of nitrogen emissions and exposure on a region-wide basis.

18. <u>Comment</u>: The ATCM should clarify if the idling limitations apply when children are not present such as evenings, summer vacation, and school holidays. [Richard Hibbs, Golden Gate Transit; Gene Walker, Golden Gate Bridge Highway and Transportation District]

Agency Response:

The ATCM's idling limits are in effect at all times. Restricting applicability to particular seasons or times of day would be difficult to justify because the ATCM curtails <u>unnecessary</u> idling only and provides ample exemptions for idling necessary for health, safety, or operational purposes. Restricting applicability when children are likely to be absent from school would afford no protection from unnecessary idling to the infants, children, and adults in the surrounding neighborhood. In addition, it is difficult to rule out the presence of children and others at schools because school facilities may be used for summer school and for a variety of after-school activities and community programs during the day and evening throughout the year.

19. <u>Comment</u>: The exemption in subsection (d)(5) of the ATCM should specify that idling necessary for refuse and recyclable pick-up is exempt. [Sean Edgar, California Refuse Removal Council; Chuck White, Government Affairs Waste Management]

Agency Response: The ATCM has been modified to include solid waste and recyclable pick-up as an example of an exemption for idling necessary to accomplish work for which a vehicle was designed. See also: Section I.B. of this document.

20. <u>Comment</u>: Since few schools are located near highways, the ARB should clarify why the CHP are mentioned as possible enforcers in Section (g) of the ATCM. [Gretchen Hardison, City of Los Angeles]

Agency Response: Under California law, "highways" are broadly defined to include any place publicly maintained and open to the public for vehicular travel, including streets (California Vehicle Code section 360). Therefore,

most if not all schools are located on a state "highway" under potential CHP jurisdiction [see also Vehicle Code sections 2268 and 2240(b)]. CHP's primary jurisdiction over "state highways constructed as freeways" [Vehicle Code section 2400(d)] does not alter this conclusion.

While the ARB Enforcement Division will have the primary enforcement authority for the ATCM, CHP and local peace officers may be requested to assist ARB inspectors when necessary, e.g., in remote locations or in cases of especially recalcitrant drivers or motor carriers. ARB inspectors may either cite violators and impose penalties under civil codes, investigate and refer violations to the CHP or local peace officers for criminal penalties, or both.

In accordance with the Board's directive, subsection (g), Enforcement, was modified to delete the words, "California Highway Patrol," and to identify peace officers as: "peace officers as defined in California Penal Code, title 3, chapter 4.5, Sections 830 et seq. and their respective law enforcement agencies' authorized representatives." The modified language does not change those agency representatives who may issue citations for violation of the ATCM; however, it does acknowledge that authorized representatives of law enforcement agencies may perform ancillary functions, e.g., review motor carrier records.

21. <u>Comment</u>: CHP motor carrier safety specialists operate commercial vehicles when they inspect school buses and facilities located on school grounds. These commercial vehicles are used like a mobile office and should not be subject to the ATCM. [Adam Cuevas, CHP]

Agency Response: Any vehicle (including one owned or operated by the CHP) meeting the definition of commercial motor vehicle in modified subsection (h)(2) of the ATCM is subject to subsection (c)(2) idling limits. However, the specific exemptions to idling limits provided in subsection (d) apply to commercial motor vehicles as well as to other affected vehicles. The Board did not direct staff to provide additional exemptions specific to the subject vehicles.

Please see Section I.B. of this document for an explanation about the replacement of the term and definition of "heavy-duty vehicle" for the term and definition of "commercial motor vehicle" throughout the ATCM.

22. Comment: The ARB should develop implementation and enforcement guidelines subject to public review prior to implementation of the ATCM. The ARB should also explain how penalties would be phased in and address the issue of the reliability of the general public reporting violations. [Gretchen Hardison, City of Los Angeles]

Agency Response: The ARB is planning comprehensive educational outreach to affected drivers and motor carriers as well as to school districts and the public. This effort will include the development and publication of enforcement guidelines and a penalty schedule.

In addition, the ARB is planning to ensure that educational materials for school districts and the public contain a list of criteria for registering a complaint regarding non-compliance. A complaint will result in the issuance of a warning letter to the motor carrier who is expected to discuss the incident with the appropriate driver. ARB will track registered complaints and use them as a guide for deciding when and where to observe driver behavior. Only enforcement personnel who actually observe a violation can issue a citation to a driver or motor carrier, thus the general public's perception of violations is not an issue.

23. <u>Comment</u>: The ARB should actively survey schools to determine if idling problems continue and should rigorously enforce the ATCM's idling limitations for heavy-duty vehicles operating at and near schools. [Diane Bailey, NRDC; Gina Solomon NRDC et al.]

Agency Response: To ensure proactive implementation of the ATCM, the Board has specifically requested ARB staff to report in 2004 on inspection and compliance findings. Generally, the ARB staff expects a high degree of compliance because requirements will be incorporated into well-established CDE-CHP training and certification programs for the key segment of drivers, i.e., drivers of school transportation. Nevertheless, the ARB Enforcement Division plans to monitor compliance of all affected drivers to the ATCM by conducting inspections at and near randomly-chosen schools as well as inspections initiated as a result of the public complaint registration process.

B. Response to Comment on Modifications to ATCM (Received March 7, 2003 through March 24, 2003)

List of Commenters That Submitted Written Comments During the 15-Day Comment Period

- John Ginn, Bowling Green Charter School, Sacramento, California, March 10, 2003
 - 1. <u>Comment</u>: John Ginn, Bowling Green Charter School, supports an idling ban for all vehicles on school grounds. [John Ginn, Bowling Green Charter School, Sacramento, California]

Agency Response: As explained in Section I.B. of this document, the Board directed staff to clarify that the ATCM applies only to school buses, school pupil activity buses, general public paratransit vehicles, youth buses,

transit buses and other heavy-duty vehicles not used solely as private passenger vehicles. Generally, private (i.e., non-commercial) passenger vehicles are not subject because few are heavy-duty and fewer still emit diesel PM, the primary TAC being regulated under the ATCM. Also, in contrast to school buses, private passenger vehicles tend to be newer, required to comply with more stringent emission standards, and periodically tested for compliance via Smog Check programs. Private passenger vehicle idling would be difficult to regulate because the drivers of such vehicles:

a) are not subject to motor carrier oversight; and b) do not receive the special and regular CDE-CHP training and testing required of drivers of buses and most commercial motor vehicles defined by the ATCM. Although the ATCM is not intended to apply to private passenger vehicles, the ARB does intend to develop educational materials to encourage parents, students, school employees, and the general public not to idle, especially in the vicinity of schools.